Steps to run the dockerized rails app:

1. Open terminal inside the project folder
2. run the command: docker-compose up
3. The above command will start mysql service, build the rails app, run its migrations and start the rails server. It will also start the nginx server with the configurations from the nginx.conf file and connects all the three.
4. Test the rails app on your host machine by going to http://localhost

Description

- After I cloned the repository from BitBucket, I modified the rails app to run with MySQL.
- This involved replacing the sqlite gem with mysql2 gem in the Gemfile and changes in config/database.yml file
- I created a Dockerfile in the project folder, with ruby base image (from DockerHub), set a work directory, copied all the project files from host to the container and ran bundle install.

Description of the docker-compose.yaml file

There are 3 parts to it: 3 images, 1 each for the database, rails app and nginx

The rails app connects to the database, and nginx is configured as a reverse proxy to the application server (puma), each of these running in different containers. Nginx configuration is in nginx.conf file.

- The db section in the docker-compose file has an attribute MYSQL_DATABASE. This creates a database with the name specified.
- The db section specifies the healthcheck attribute which is used to check if the db service is ready in the app section (by using depends_on attribute) of the docker-compose file. The app service depends on the health status of the db service because I run migrations in the app service.
- In the app section, I run the migrations and start the rails server. It also sets the database environment variables which are used in config/database.yml file.
- In the server section, I use the nginx image from DockerHub and my modified nginx.conf file to start nginx and connect to the container running the rails server.
- Nginx serves as a reverse proxy. Explicit header is added in the server block to pass the host header values to the application server (since the rails app requires the authenticity token). The host port 80 is mapped to the port 80 to which nginx server is listening to (mentioned in nginx.conf)